

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010233**Date Inspected:** 19-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

This QA inspector performed MT of approximately 15% of the repaired area previously tested and accepted by ZPMC Quality Control personnel. Punch List Item 1688 (Inspection request # 004680) longitudinal diaphragm flange located in 2AW.

1. LD017-001-007

2AE

SMAW repair welding on weld joint 004 located at CA103 counter weight side of segment. (Exterior)

Welder is identified as Mr. Haijun (201087). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR repair procedure #899.

Y Locations of excavations by above noted welder (201087) are located at approximately between 5000~6640mm.

SMAW repair welding on weld joint 044 located at SEG008A cross beam side of segment. (Interior)

Welder is identified as Mr. Hu Yacheng (049339). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR repair procedure #899.

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SMAW repair welding on weld joint 044 located at SEG008A cross beam side of segment. (Interior)  
Welder is identified as Mr. Zhao Guanglin (044779). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and CWR repair procedure #899.

### NDT Observation

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations are as followed:

#### 2AE

1. Edge to deck plate weld joint excavation areas located at y locations 6770, 6860, and 6945mm bike path side of segment. This QA Inspector noted all noted areas were accepted by ZPMC.

#### 1AW

2. Edge to deck plate weld joint excavation areas located at y locations 5000~6640mm cross beam side of segment. (3 transverse and porosity indications)

#### 1BE

3. Edge to deck plate weld joint excavation areas located at y locations 6770, 6860, and 6945mm cross beam side of segment. This QA Inspector noted all noted areas were accepted by ZPMC.

#### 2BW

4. Edge to deck plate weld joint excavation areas located at y locations 95~200mm (4 transverse indications), 310~515mm (2 transverse indications), 310mm~515mm, 1540mm~1580mm, 310mm~515mm, 1740mm, 2550~2630mm (1 transverse indication), 3630mm, 4700mm (longitudinal indication), 5860mm (4 transverse indications), 6530~6610mm (1 transverse indication and burn through) and 8740~9120mm (burn through).

#### 1BW+1AW

5. Deck plate weld joint OBW1-006 repair excavation area located at y location 1640mm (4 transverse indications).

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

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remedial efforts please contact Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Alaniz,Joe	Quality Assurance Inspector
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<b>Reviewed By:</b>	Miller,Mark	QA Reviewer
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